Supplementary information

Quantitative evaluation of cellular internalization of

polymeric nanoparticles within laryngeal cancer cells and

immune cells for enhanced drug delivery

Authors and affiliations:

Li-Juan Ma^{1#*}, Ruichao Niu^{2#}, Xi Wu¹, Jun Wu¹, En Zhou¹, Xu-Ping Xiao¹, and Jie

Chen²*

¹ Department of Otolaryngology Head/Neck Surgery, Hunan Provincial People's Hospital, The

First Affiliated Hospital of Hunan Normal University, Changsha, 410005, P.R. China;

² Department of Respiratory Medicine, Xiangya Hospital, Central South University, Changsha,

Hunan Province, P.R. China;

These authors contributed equally to this work.

* Corresponding Author:

Li-Juan Ma, Department of Otolaryngology Head/Neck Surgery, Hunan Provincial People's

Hospital, The First Affiliated Hospital of Hunan Normal University, Changsha, 410005, P.R.

China:

Email: horserma@163.com;

Jie Chen, Department of Respiratory Medicine, Xiangya Hospital, Central South University,

Changsha, Hunan Province, P.R. China;

Email: chenjie869@163.com;

Tel.: +86-7318-227-8012;

Fax: +86-7318-227-8019

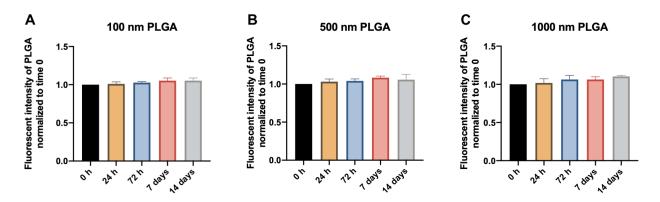
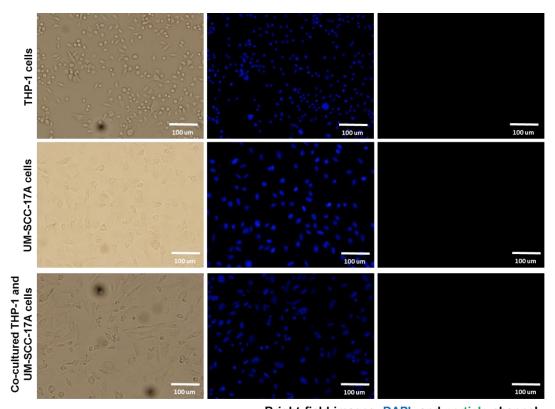


Figure S1: Fluorescent intensity of various PLGA particles over two weeks after preparation. All fluorescent signals were normalized to the initial signal at time 0 after preparation.



Bright field images, DAPI, and particle channel

Figure S2: No particles can be observed in the untreated cells of control group.

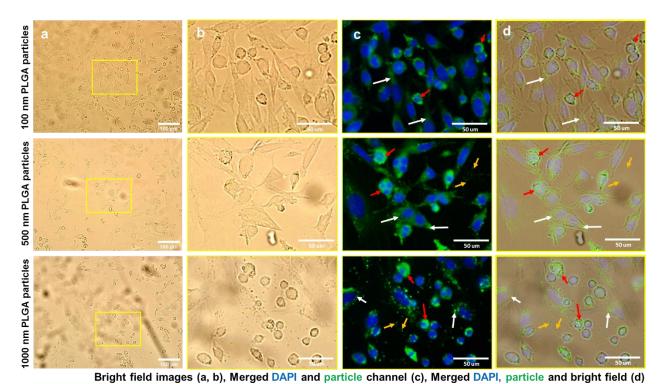


Figure S3: Co-localization of bright field images (b) with fluorescent images (c) displays the intracellular accumulation of PLGA particles in THP-1 cells (red arrows) or UM-SCC-17A cells (white arrows) and extracellular particles (yellow arrows) in the co-cultures (d).

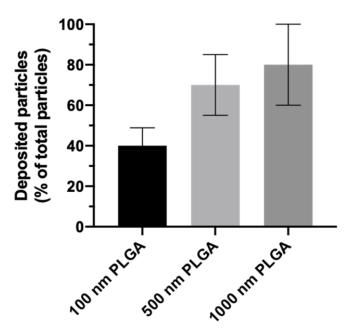


Figure S4: Percentages of PLGA particles deposited in the cells (intracellular particles) normalized to the applied particles (the total dose) at 24 h after incubation.